

# PATENT ABSTRACTS OF JAPAN

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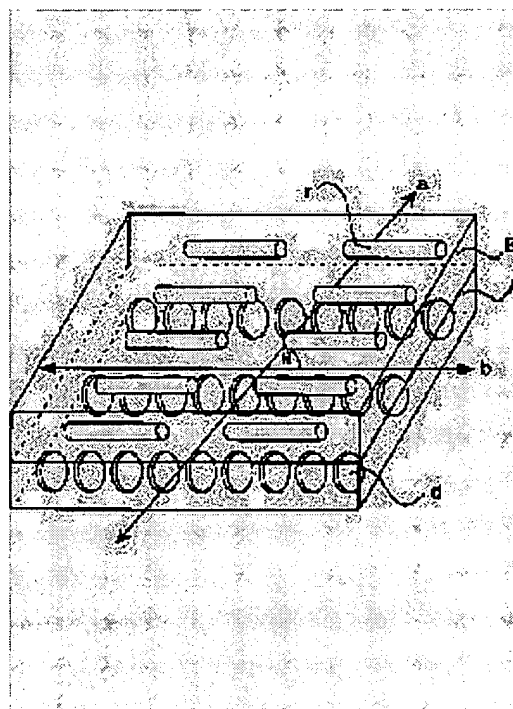
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## (54) PHASE DIFFERENCE PLATE AND CIRCULARLY POLARIZING PLATE

### (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a wide band  $\lambda/4$  plate which is extremely thin.

SOLUTION: The phase difference plate is produced by laminating an optically anisotropic layer (A) having substantially  $\pi$  phase difference at 550 nm wavelength and an optical anisotropic layer (B) having substantially  $\pi/2$  phase difference at 550 nm. All of the ratios of retardation/wavelength of the obtained phase difference plate measured at 450 nm, 550 nm and 650 nm range from 0.2 to 0.3. The total thickness of the optical anisotropic layer (A) and the optical anisotropic layer (B) is 500 nm to 20  $\mu\text{m}$ .



## LEGAL STATUS

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